

Probiotics, an Optimistic Therapy for Ulcerative Colitis

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Ulcerative colitis (UC) is a chronic, idiopathic, relapsing inflammatory disorders of the gastrointestinal tract and it has been increasing over the last few decades with globalization [1].

UC is thought to result from dysregulation of the intestinal mucosal immune system. Inflammation in UC may be limited to the rectum only or extend to involve the entire colon [2]. Unfortunately, patients with UC suffer from abdominal pain, diarrhea bloody stools, weight loss and fatigue which impair the quality of life of the patients [3].

Treatment for UC is divided into induction treatment for control of symptoms and maintenance treatment to prevent recurrence and it depends on the extent and location of disease. Several agents are used for management of UC such as mesalamine (5-aminosalicylic acid) corticosteroids, immunosuppressant agents, and anti-tumor necrosis factor (TNF) monoclonal antibodies to suppress intestinal inflammation but most patients are non-responsive to these therapies, or intolerant because of their adverse effects [4].

The gut microbiota has protective, immunological functions for the host. However new evidence suggests that the balance of aggressive bacteria and protective microbiota is altered in patients with UC due to aggressive immune response against normal gut microbiota in genetically predisposed individuals [5].

Recent studies have focused on Probiotics as an attractive aid to current conventional therapies. These studies confirm the role of multiple formulations of probiotics for both the induction and maintenance of remission of UC. Probiotics contain viable non-pathogenic microorganisms such as bifidobacterial and lactobacilli that tend to improve the intestinal mucosal barrier function, inhibit bacterial overgrowth, in addition short chain fatty acids released from these bacteria such as acetic acid and propionic acid have anti-inflammatory effect [4]. The percentage of occurrence of adverse events, need for systemic steroid therapy, hospitalization and surgery have been reduced in patients treated with probiotics [6]. Probiotics are thought to have an eminent role in management of ulcerative colitis.

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